February 17, 2012
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MICE Spectrometer Solenoid Test Plan Workshop

Meeting Goals/Charge:

1. Review and comment on the insulating vacuum and cool down scheme.
    a. Insulating vacuum system
        i. Is the system appropriate for establishing the magnet insulating vacuum?
        ii. Does the proposed pump down procedure adequately address the issue of water removal from the MLI?
        iii. Is the provided instrumentation sufficient to assess the level of insulating vacuum during cooldown and operation?
    b. Cool down apparatus and plan
        i. Does the N2 cooldown apparatus address all of the requirements for cooling the system from room temperature to LN2 temperature?
        ii. Does the system and plan adequately prevent excessive stress in the cold mass welds?
        iii. Will the scheme for transitioning from N2 to LHe cooldown effectively remove all N2 from the system?

2. Review and comment on the plans and method for completing the magnet coil training.
    a. Does the training scenario adequately prepare the magnet for normal operation in the MICE hall?
    b. Will the proposed test plan be sufficient to demonstrate stable operation with no helium boil off?

3. Review and comment on the instrumentation/controls plan and the power supply setup
    a. Instrumentation/controls plan.
        i. Is the instrumentation plan sufficient in order to debug unexpected problems during cool down and operation?
        ii. Can operation of the magnet at full current with no helium boil off be verified with the existing instrumentation and data logging scheme?
        iii. Is the fast data logging capability adequate to fully characterize the coil performance during a quench?
    b. Power supply setup
        i. Is the current power supply configuration sufficient to meet the requirements of magnet training as well as normal operation?
        ii. Is the power supply setup and control sufficient to protect the magnet leads, quench system components and power supplies during a quench?

4. Review and comment on the magnetic measurement plans
    a. Is the proposed magnetic measurement scheme adequate to verify nominal magnet performance?
    b. What other magnetic measurements are necessary/desired?

5. Review and comment on the safety plan
    a. Is the overall safety of personnel adequately addressed?
    b. Do the participating individuals have the necessary level of training?